**POWER OF ATTORNEY
AND
CORRESPONDENCE ADDRESS
INDICATION FORM**

Application Number	10/673,722
Filing Date	September 29, 2003
First Named Inventor	David Haase, et al
Title	System and Method for Managing ...
Art Unit	2187
Examiner Name	Farrokh, Hashem
Attorney Docket Number	EMC-03-103

I hereby revoke all previous powers of attorney given in the above-identified application.

I hereby appoint:

☒ Practitioners associated with the Customer Number:

24227

OR

☐ Practitioner(s) named below:

Name	Registration Number

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

OR

<input type="checkbox"/> Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

I am the:

☐ Applicant/Inventor.☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

SIGNATURE of Applicant or Assignee of Record

Signature		Date	Jan 23 2006
Name	John M. Gunther	Telephone	508-293-7255
Title and Company	Vice President and Assistant General Counsel, EMC Corporation		

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: EMC Corporation

Application No./Patent No. 10/673,722 Filed/Issue Date: September 29, 2003

Entitled: **SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND REPLICATION PROCEDURES IN A SATA STORAGE ENVIRONMENT**

EMC Corporation

a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of less than the entire right, title and interest.
(The extent (by percentage) of its ownership interest is _____ %)

in the patent application/patent identified above by virtue of either:

- A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 015591, Frame 0247, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

John M. Gunther
Signature

1-23-06
Date

John M. Gunther
Printed or Typed Name

508-293-7255
Telephone Number

Vice President and Assistant General Counsel
Title



EMC - 03 - 103

**CORRECTED
NOTICE**

UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 09, 2005

PTAS

EMC CORPORTION
ROBERT KEVIN PERKINS
176 SOUTH STREET
HOPKINTO, MA 01748

**UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/22/2004

REEL/FRAME: 015591/0247
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

HAASE, DAVID

DOC DATE: 07/16/2004

ASSIGNOR:

GULVE, SOMNATH

DOC DATE: 07/16/2004

ASSIGNOR:

HAYNES, MICHAEL D.

DOC DATE: 07/16/2004

ASSIGNOR:

DUPREY, DENNIS

DOC DATE: 07/16/2004

ASSIGNEE:

EMC CORPORATION
176 SOUTH STREET
HOPKINTON, MASSACHUSETTS 01748

015591/0247 PAGE 2

SERIAL NUMBER: 10673722

FILING DATE: 09/29/2003

PATENT NUMBER:

ISSUE DATE:

TITLE: SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND
REPLICATION PROCEDURES IN A DATA STORAGE ENVIRONMENT

MAURICE CARTER, PARALEGAL
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

07-27-2004

EMC-03-103

ET

102799662

To the Director of Patents and Trademarks Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):
David Haase, Somnath Gulve, Michael D. Haynes,
Dennis Duprey

Execution Date: July 16, 2004Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No**3. Nature of Conveyance:**

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmation License
☐ Other _____

2. Name and address of receiving party(ies):Name: EMC Corporation

Internal Address: _____

Street Address: 176 South StreetCity: HopkintonState: MassachusettsCountry: USA Zip: 01748Additional name(s) and address(es) attached? ☐ Yes ☒ No**4. Application or patent number(s):**☐ This document is being filed together with a new application.A. Patent Application No.(s) 10/673,722

B. Patent No.(s) _____

Additional numbers attached? ☐ Yes ☒ No**5. Name and address of party to whom correspondence concerning document should be mailed:**Name: Robert Kevin PerkinsInternal Address: EMC CorporationOffice of the General CounselStreet Address: 176 South StreetCity: Hopkinton State: MA Zip: 01748Phone Number: (508) 293-6985Fax Number: (508) 293-7189Email Address: Perkins_RKevin@emc.com**6. Total number of applications and patents involved:**[1]**7. Total fee (37 CFR 3.41): \$ 40.00**

- ☐ Authorized to be charge by credit card
☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Informationa. Credit Card Last 4 Numbers _____
Expiration Date _____b. Deposit account number 05-0889Authorized User Name Robert Kevin Perkins**9. Signature:**

Signature

Robert Kevin Perkins, Reg. No. 36,634

Name of Person Signing

Date

Total number of pages including cover sheet, attachments, and documents: ☐

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop: Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria VA 22313-1450

ASSIGNMENT

WHEREAS, we, David Haase, Somnath Gulve, Michael D. Haynes and Dennis Duprey have invented an invention comprising and/or embodying certain improvements or discoveries or both as described in an application for Letters Patent of the United States entitled SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND REPLICATION PROCEDURES IN A DATA STORAGE ENVIRONMENT, the specification of which:

- ☐ is being executed on even date herewith and is about to be filed in the United States Patent Office;
- ☒ was filed on September 29, 2003 as U.S. Application No. 10/673,722;
- ☐ was patented under U.S. Patent No. _____ on _____.

WHEREAS, EMC Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 176 South Street, Hopkinton, Massachusetts 01748 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey to ASSIGNEE all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its

successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals as set forth below:

Date:

7/16/04


Inventor's Signature

Print full name of first inventor:

David Haase

Residence:

904 Cedar Point Court, Fuquay Varina, NC 27526

Citizenship:

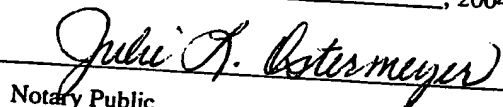
USA

Mailing Address:

Same as above

STATE/Commonwealth of NORTH CAROLINA
COUNTY OF DURHAM

Then personally appeared before me the above-named David Haase and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 16TH day of JULY, 2004.


Notary Public

Print Name: JULIE L. OSTERMEYER

My Commission expires 02/09/2008

Date: 07/16/2004


Inventor's Signature

Print full name of second inventor:

Somnath Gulve

Residence:

2224 Glengate Circle, Morrisville, NC 27560

Citizenship:

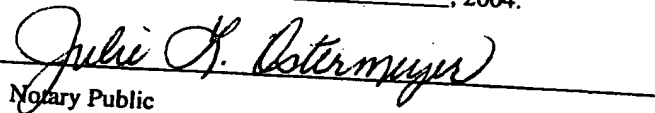
India

Mailing Address:

Same as above

STATE/Commonwealth of NORTH CAROLINA
COUNTY OF DURHAM

Then personally appeared before me the above-named Somnath Gulve and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 16TH day of JULY, 2004.


Notary Public

Print Name: JULIE L. OSTERMEYER

My Commission expires 02/09/2008

Date:

7/16/04

Michael D. Haynes
Inventor's Signature

Print full name of third inventor:

Michael D. Haynes

Residence:

8513 Wood Lawn Dr., Raleigh, NC 27613

Citizenship:

USA

Mailing Address:

Same as above

STATE/Commonwealth of

NORTH CAROLINA

COUNTY OF

DURHAM

Then personally appeared before me the above-named Michael D. Haynes and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 16TH day of JULY, 2004.

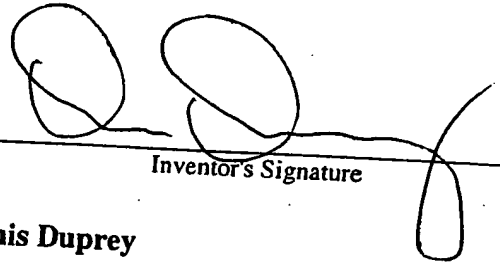
Julie A. Ostermeyer
Notary Public

Print Name: JULIE L. OSTERMEYER

My Commission expires 02/09/2008

Date:

7/16/04



Inventor's Signature

Print full name of fourth inventor:

Dennis Duprey

Residence:

100 Tibury Court, Raleigh, NC 27615

Citizenship:

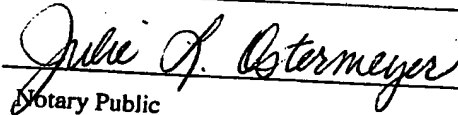
USA

Mailing Address:

Same as above

STATE/Commonwealth of NORTH CAROLINA
COUNTY OF DURHAM

Then personally appeared before me the above-named Dennis Duprey and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this 16TH day of JULY, 2004.

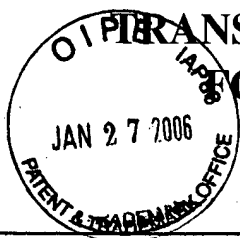


Notary Public

Print Name: JULIE L. OSTERMEYER

My Commission expires 02-09-2008

2FW



TRANSMITTAL FORM

Application No.:	10/673,722
Filing Date:	September 29, 2003
First Named Inventor:	David Haase, et al
Confirmation No.	2465
Group Art Unit	2187
Examiner:	Farrokh, Hashem
Customer No.	24227
Total Number of Pages in this Submission:	Docket No. EMC-03-103

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Authorization for the Commissioner to charge Deposit Account No. 05-0889 for fees associated with this transaction (in duplicate) <input type="checkbox"/> Amendment/Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Decl. <input type="checkbox"/> Extension of Time Request for _____ Months <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Request for Continued Examination Transmittal <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Fee Transmittal (in duplicate)	<input type="checkbox"/> Assignment <input type="checkbox"/> Recordation Cover Sheet <input type="checkbox"/> Declaration/Power of Attorney <input checked="" type="checkbox"/> Power of Attorney and Correspondence Address Indication Form <input checked="" type="checkbox"/> Statement Under 37 CFR 3.73(b) <input type="checkbox"/> Formal Drawings <input type="checkbox"/> Letter to Official Draftsperson with _____ () sheets of redlined changes to drawings <input type="checkbox"/> Copy of PTO 948, "Notice of Draftsperson's Patent Review" <input type="checkbox"/> Preliminary Amendment <input type="checkbox"/> Additional Enclosures:	<input type="checkbox"/> Petition for Revival of an Unintentionally Abandoned Application [37 CFR 1.137(b)] (in duplicate) <input type="checkbox"/> Status Inquiry <input type="checkbox"/> Form PTOL-85B, Part B -Issue Fee Payment Transmittal," (in duplicate) <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Customer Number Association <input checked="" type="checkbox"/> Certificate of First Class Mailing <input type="checkbox"/> Certificate of Express Mail Mailing <input checked="" type="checkbox"/> Postcard
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SIGNATURE OF APPLICANT, ATTORNEY OR AGENT

Date <u>January 25, 2006</u> Tel: (508) 293-6985 Fax: (508) 293-7189	 Robert Kevin Perkins Esq. (Reg. No. 36,634) EMC Corporation Office of the General Counsel 176 South Street Hopkinton, MA 01748
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CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8]

I hereby certify that this correspondence and the above-referenced enclosures are being:

<input checked="" type="checkbox"/> Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. <input type="checkbox"/> Transmitted by facsimile on the date shown below to the Patent and Trademark Office at (703)

Date <u>January 25, 2006</u>	 Signature Sandra A. Kulaga Typed or printed name of person signing certificate
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